APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,363	03/09/2007	Arjan Te Marvelde	P18986-US1	9760

27045   7590   11/18/2009
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EXAMINER
PHAM, TIMOTHY X

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
11/18/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/584,363	TE MARVELDE ET AL.
	Examiner	Art Unit	
	TIMOTHY PHAM	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*23 June 2006*</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*20-40*</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>*20-40*</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claims 1, 33-35, 37, and 29 are objected to because of the following informalities: the term "XML" is an acronym which can mean different things and/or change in meaning over time; hence, it would be desirable to write out the actual words to which the acronym refers.

Claims 27-28 are objected to because of the following informalities: the terms "ROM" and "RAM" are an acronym which can mean different things and/or change in meaning over time; hence, it would be desirable to write out the actual words to which the acronym refers.

Claims 35 and 40 are objected to because of the following informalities: the dependencies of the claims are incorrect. The dependencies of claims 35 and 40 which currently depend from claims 15 and 18, which are cancelled claims, should be replaced with claims 34 and 39, respectively. Appropriate correction is required. For examination purposes, the Examiner is assuming claims 35 and 40 depend on claims 34 and 39, respectively.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 39-40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims are drawn to a "computer program product" comprising means to store instructions. In the state of the art, transitory signals are commonplace as a medium for transmitting computer instructions and thus, in the absence of any evidence to the contrary and given the broadest reasonable interpretation, the scope of a "computer program

product" covers a signal per se. A transitory signal does not fall within the definition of a

process, machine, manufacture, or a composition of matter; therefore, claims 39-40 do not fall

within a statutory category.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1-20, 22-32, 36-37, and 39-40 are rejected under 35 U.S.C. 102(b) as being

anticipated by Ferris (US 2003/0008684; Cited in IDS).

Regarding claims 20 and 37, Ferris discloses a radio base station (Abstract; paragraphs

[0002], [0006], [0013]) and a method of operating a radio basestation comprising:

a monitor (paragraphs [0004], [0044], e.g., screen);

a memory (Fig. 2, reference "SDRAM"; paragraph [0130], e.g., memory and CPU), the

memory being connected to the monitor (Fig. 2) and arranged for storing tasks and data (Fig. 2;

paragraphs [0016], [0041], [0053], [0130], e.g., The GBP is a powerful hardware platform

designed to provide the MIPs and throughput required for wireless communication digital signal

processing tasks); and

one or more resources (paragraphs [0017], [0020], e.g., processor), each of the resources

being connected to the monitor (Fig. 2) and arranged for at least one of performing a function

(paragraphs [0052], [0109], [0132], e.g., its functions will involve boot control, peripheral and

processor card configuration, and remote monitoring support, in addition to provision of the bus-mastering fast Ethernet IP interface onto the backnet for incoming and outgoing Iub messages) and executing a program (paragraphs [0052], [0102], e.g., they can be implemented by micro-processors and programmed computers. The term `DSP` used in this specification covers any device or system, whether in software or hardware, or a combination of the two, capable of performing digital signal processing), wherein the tasks are stored in an XML format (Abstract; paragraph [0004], [0007], [0016], [0042], [0044], e.g., XML or using high-level software).

Regarding claim 22, Ferris discloses the radio base station according to claim 20 above, wherein connections between the memory and the monitor, and between the resources and the monitor are implemented by means of a bus (paragraphs [0171], [0201], e.g., Bus contention (two or more processors wanting to transfer data at the same time) can also reduce overall efficiency).

Regarding claim 23, Ferris discloses the radio base station according to claim 22 above, wherein the resources are arranged for mutual communication via the bus (paragraphs [0007], [0024], [0041], e.g., a PCI-bus).

Regarding claim 24, Ferris discloses the radio base station according to claim 23 above, wherein using the bus is based on a datagram principle (paragraphs [0042], [0081], [0110], e.g., IP packet data; therefore it is a datagram principle).

Regarding claim 25, Ferris discloses the radio base station according to claim 20 above, wherein the memory comprises a task memory (paragraphs [0059], [0102], e.g., physical board or integrated circuits) and a data memory (paragraphs [0107], [0142], [0186], [0227], e.g., Extensive set of vector-processing primitives (more completely listed at Appendix 2), covering

operations such as FFTs, FIR and IIR and wave digital filters, decimation, correlation, complex

multiplication, etc).

Regarding claim 26, Ferris discloses the radio base station according to claim 20 above,

wherein the monitor comprises a state machine sequencer adapted to handle several state

machines in parallel (paragraphs [0178], [0237], [0244], e.g., The CVM provides support for the

structures (e.g., symbol and data-directed pipelines, and state machines)).

Regarding claim 27, Ferris discloses the radio base station according to claim 26 above,

wherein the memory comprises a ROM portion (paragraph [0236]) and a RAM portion

(paragraph [00150]), the ROM portion adapted to store state machine definitions for the state

machine sequencer, task definitions and default structures (paragraph [00237]), and the RAM

portion adapted to store dynamic data (paragraphs [00150], [0166]).

Regarding claim 28, Ferris discloses the radio base station according to claim 27 above,

wherein the RAM portion is adapted to store a resource allocation table (paragraphs [163],

[0188]), a data block list (paragraphs [0212], [0223]), and data blocks (paragraphs [0059]).

Regarding claim 29, Ferris discloses the radio base station according to claim 28 above,

wherein the monitor comprises an executor arranged for sending commands to resources

(paragraphs [0011], [0040], [0054]), sending task block requests to memory (paragraphs [0011],

[0040], [0054], [0176], e.g., The scheduler then dispatches the request to the appropriate

datapath for execution, which may involve calling a function on a DSP, or passing data to an

FPGA or ASIC), receiving status information from resources (paragraphs [0072], [0090]),

receiving task blocks from memory and maintaining the resource allocation table (paragraph

[0149], e.g., a scheduler in the CVM can intelligently allocate tasks in real-time to computational resources in order to maintain optimal operation).

Claim 30 is rejected with the same reasons set forth to claim 29.

Regarding claim 31, Ferris discloses the radio base station according to claim 20 above, wherein the resources comprises at least one selected from the group consisting of a transmitter, a receiver, an analog signal manifold, a digital to analog converter, an analog to digital converter, a control unit, and a digital signal processor (paragraph [0041], e.g., DSPs; It is noted that this claim is the alternative claim; therefore only a DSP limitation is addressed).

Regarding claim 32, Ferris discloses the radio base station according to claim 31 above, wherein the resources comprise at least one digital signal processor storing an executable image for performing a program (paragraph [0245], e.g., the processing chain is established on the model (which will optionally be performed by graphical arrangement and parameterisation rather than coding)).

Regarding claim 36, Ferris discloses the radio base station according to claim 20 above, as sued in a mobile communications network (paragraph [0001], e.g., A basestation is a transceiver node in a radio communications system, such as UMTS (Universal Mobile Telephony System)).

Claim 39 is drawn to a computer program product adapted to be executed by a processor of a radio base station having a monitor, memory and one or more resources, the memory being connected to the monitor for storing XML defined tasks and data, each of the resources being connected to the monitor, the computer program product comp comprising code means for generating steps of claim 1. Therefore, the same rationale applied to claim 1 applies. In addition,

Ferris inherently discloses a computer program product, i.e., given that Lee discloses a process

(paragraph [0071]), the process would be implemented by a processor that requires a computer

program product, e.g., a RAM, to function.

Regarding claim 40, Ferris discloses the computer program product of claim 39 above,

implemented as a data carrier (paragraph [0136], e.g., disk store; therefore it is a data carrier).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   Claims 21, 33-35, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ferris in view of Ghanea-Hercock (US 2004/0037423; Cited in IDS, same as WO 02/33547).

Regarding claims 21 and 38, Ferris discloses the radio base station and the method

according to claims 20 and 37 respectively above, wherein the resources that are arranged to

execute a program are also arranged to generate trigger signals and send them to the monitor

(paragraphs [0072], [0120],]e.g., status and alarm messages passed back from RF to GBP), and

a timing/sync signal from GBP to RF module (to enable operations to be carried out relative to a

particular time code)), the monitor being arranged to check whether resources required for

performing the task are available (paragraphs [0061], [0084], [0124], e.g., if the same hardware

platform becomes available with an upgraded specification, the code will still have to undergo a

`mini-port` to be able to use those additional features (more on-board memory, for example, or a

second MAC (Multiply Accumulate) unit)) and sending commands to selected resources specifying the task to be performed (paragraphs [0016], [0090], [0114], e.g., SNMP messages will contain an RTP timestamp field allowing commands and messages to utilise the same timebase control as the sample datastream).

Ferris fails to specifically disclose the monitor being arranged to receive the trigger signals, to read one or more tasks related to the trigger signals from the memory.

However, Ghanea-Hercock discloses the monitor being arranged to receive the trigger signals, to read one or more tasks related to the trigger signals from the memory (paragraphs [0075], [0076], e.g., The task manager parses the provided task plan and schedules the necessary services and actions).

Therefore, taking the teachings of Ferris in combination of Ghanea-Hercock as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to have the monitor to receive the trigger signals, to read one or more tasks related to the trigger signals from the memory for advantages of performing to check whether each task attempted by the agent program conforms to the task data (Ghanea-Hercock: paragraph [0027]).

Regarding claim 33, Ferris discloses the radio base station according to claim 20 above, fails to specifically disclose wherein the XML defined tasks comprise bricks created with document template definitions.

However, Ghanea-Hercock discloses the XML defined tasks comprise bricks created with document template definitions (paragraph [0128], e.g., [0128] Below is the above message in an XML format. <DOCTYPE fipa_acl SYSTEM "fipa_acl.dtd">)

Therefore, taking the teachings of Ferris in combination of Ghanea-Hercock as a whole,
it would have been obvious to one having ordinary skill in the art at the time of the invention by
applicant to have the XML defined tasks comprise bricks created with document template
definitions in order to define and describe the elements and groups thereof and the order in which
they are allowed to appear within XML document.

Regarding claim 34, Ferris discloses the radio base station according to claim 20 above,
fails to discloses wherein the XML defined tasks comprise at least one of: task name, priority,
definitions of resources required, definitions of channels between resources, definitions of data
blocks to be used, definition of commands for resources, definitions of code segments to be used
by processors of resources, and status of resources.

However, Ghanea-Hercock discloses wherein the XML defined tasks comprise at least
one of: task name, priority, definitions of resources required, definitions of channels between
resources, definitions of data blocks to be used, definition of commands for resources, definitions
of code segments to be used by processors of resources, and status of resources (paragraphs
[0106]-[0124], [0128]).

Therefore, taking the teachings of Ferris in combination of Ghanea-Hercock as a whole,
it would have been obvious to one having ordinary skill in the art at the time of the invention by
applicant to have the XML defined tasks comprise at least one of: task name, priority, definitions
of resources required, definitions of channels between resources, definitions of data blocks to be
used, definition of commands for resources, definitions of code segments to be used by
processors of resources, and status of resources in order to define and describe the elements and
groups thereof and the order in which they are allowed to appear within XML document.

Regarding claim 35, Ferris in combination with Ghanea-Hercock discloses the radio base

station according to claim 15 above, wherein the

definitions of data blocks have the following structure definition:

STRUCTUREDEFINITION.DTD

<!ELEMENT structuredefinition (structurename, structureblock)>

<!ELEMENT structurename (# BLOCKNAME)>

<!ELEMENT structureblock (#TEXT)>

BLOCKLIST. XML

<structuredefinition>

<structurename> blocklist </structurename>

<structureblock>

"Contents of block in text"

</structureblock>

</structuredefinition> (Ghanea-Hercock: paragraph [0128], noted the message in an

XML format).

Therefore, taking the teachings of Ferris in combination of Ghanea-Hercock as a whole,

it would have been obvious to one having ordinary skill in the art at the time of the invention by

applicant to have the definitions of data blocks have the following structure definition of

document type (DTD) in order to define and describe the elements and groups thereof and the

order in which they are allowed to appear within XML document.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY PHAM whose telephone number is (571)270-7115. The examiner can normally be reached on Monday-Friday; 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Timothy Pham/   /VINCENT P. HARPER/
Examiner, Art Unit 2617   Supervisory Patent Examiner, Art Unit
                                                            2617